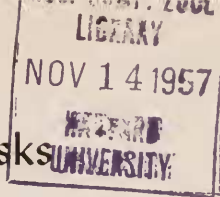


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Charles Johnson Maynard and his work in Malacology

By RUTH D. TURNER

In many ways Charles Johnson Maynard was a unique and brilliant man. He was a born naturalist, teacher, and field worker, who not only interested others in his work but kept detailed notes on all he observed. He was very much an individualist and an original thinker, but he lacked the basic biological training so essential to one working in the field of systematics. This individuality and lack of training was evident in his work, as well as in his inability to get along with those professionally engaged in the same field. Consequently, as time went on he isolated himself more and more from his fellow workers and showed little interest in the literature of the day. In his scientific work, Maynard became a very lonely man and the tremendous energy which he put into his nature walks and into the Maynard Chapter of the Newton Natural History Society was probably a result of a frustrated desire for leadership. There is no question that Maynard influenced many young people in natural history both directly and indirectly through the teachers who attended his classes. It was most unfortunate that he did not have a good early training, for his contributions could have been far more important had he understood the field of systematic zoology and the principles upon which his fellow scientists based their work.

One of the young boys who attended Maynard's classes and who spent many happy hours in his workshop later spoke with real feeling of his love for the man, recalling the fact that at one time when Maynard was very ill he had gone home to pray for his recovery. He said that Maynard was a hard worker,

often even eating his meals in the barn while he worked. Apparently Maynard paid little attention to his personal appearance, a factor which perhaps was disturbing to some of his associates, but meant little to a teen-age boy.

Charles W. Townsend (1930) who knew Maynard in his later years wrote: "He was of a sunny and cheerful disposition, as an observer he was keen and accurate and his writings abound in interesting and original observations. He was what has sometimes been called a 'natural naturalist' and it was to be regretted that he had not had a more thorough foundation in science."

Charles Foster Batchelder (1951) wrote in a similar vein. "The limitations of his early education probably contributed to making him the solitary observer and student he was. This somewhat solitary habit no doubt deprived him of much wholesome criticism of his work, which, had he had it, might have given him much higher standards. Yet, in various fields, research that he did might never have been attempted had he been fully aware of the standards and the existing background of knowledge that formed the basis from which others worked. His independence of mind and disregard, perhaps to some degree unconscious, of other scientific writers' accepted standards and habitual ways in matters of writing and publishing are more than conspicuous in his own writings."

ACKNOWLEDGMENTS

I am most grateful to the late Pearl J. Maynard, only child of Charles Johnson Maynard, for much help in preparing this account. She not only loaned me Maynard's autobiography, a manuscript of about a thousand typewritten pages, but also a photograph of her father. She talked very freely about her father and showed me his workshop in the barn. Since the death of Miss Maynard in 1953, we have been unable to trace the manuscript but fortunately all data pertaining to his work on the genus *Cerion* had been copied and is now in the files of the Department of Mollusks at the Museum of Comparative Zoology.

Mrs. William F. Clapp, who collaborated with Maynard on some of his *Cerion* papers, was most kind in telling me of her work with Maynard.

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Charles J. Maynard,

May 6, 1845–October 15, 1929

Plate 22. From an original photograph.

Charles Johnson Maynard was a direct descendant of John Maynard who had emigrated from England in 1640 and settled in Sudbury, Massachusetts. Charles' father, whose name was also John, married Emeline Sanger and for a time they lived in Waltham, Massachusetts. Here, their first son, George Sanger Maynard, was born in 1832. In 1840, they bought a farm of about 40 acres in Newton where both Gilbert and Charles were born. Charles was born on May 6, 1845 and at a very early age he began to show an interest in natural history, particularly in birds. His mother was sympathetic towards this interest and encouraged him throughout his childhood. His father died in the summer of 1857 when Charles was only twelve years old and in 1860 his older brother George died of tuberculosis. This left Gilbert and Charles to run the farm, though apparently Gilbert took most of the responsibility. According to his daughter, Charles was the pet of the family and was allowed to do pretty much as he pleased. He attended the local school until he was sixteen but after that was expected to work on the farm. However, he was not interested in farming and expressed his feeling on this in his biography. "My innate desire to investigate the mysteries of nature was too strong to allow me to settle down to farming. Besides this, I was ambitious to achieve more than the usual aspirations of the mere farmer of that time. My mother, however, thought that the studies I preferred would not lead to financial success in life and strongly urged me to select some trade or other occupation."

Following his mother's advice he looked into several trades, among them wood engraving, about which he wrote as follows: "When I was a child I took a great liking to the art of wood engraving. Not because I had ever seen any of that work done, for I had not, but with the idea in mind that I should like the work, I consulted a neighbor who was a wood engraver. After questioning me as to my ability to make drawings and after finding me not at all proficient in that art, he said emphatically that I would not succeed as an engraver so I abandoned that project." It is interesting to see that in later years he made all of his own illustrations and wood engravings, as well as hand coloring many of his plates. These illustrations are remarkably well done considering his complete lack of training.

Maynard tried working in the Waltham Watch Factory for

a time but again he was not happy and wrote: "I soon saw that my heart was not in the business and I embraced every opportunity to return to my favorite study . . . and after a year left the factory." In 1864 he went to work for a watch and clock repairer in Waltham. He stayed there a year and then went to one or two other places where the advantages for learning appeared greater and he had more time to devote to nature study. Though he was always looking for an increased opportunity to study, there does not seem to have been any idea in Maynard's mind of going on to college; at least there is no mention of it in his notes.

In 1866 he met Mr. Floyd, the taxidermist, who had been engaged to unpack the Lafresnaye collection of birds which had been purchased by Dr. Henry Bryant for the Boston Society of Natural History. Floyd asked Maynard to help him with this work and it was while doing this that Maynard had an opportunity to meet the great scientists then associated with that institution. Here he received the necessary start in the collecting and taxidermy business and was soon making collections for private schools in Boston and vicinity, for John Cumings, E. A. Samuels, Henry Henshaw, J. A. Allen and others. His acquaintance with William Brewster, who collaborated with him on some of his early papers, probably also dates from this period.

According to his daughter, it was about this time that he opened a small business in natural history supplies, with an office at 36 Winter Street, Boston, Massachusetts. There seems to be considerable confusion as to the exact time and place of his various offices in Boston, but it is clear that his first office was on Winter Street, that in 1885 he was at 339 Washington Street, and that at one time he had a shop in Pemberton Square and also one on West Street. His letter head is typical of his business—"C. J. Maynard and Co./Publishers, Dealers in Birds Eggs, Skins, Minerals, and Naturalists Supplies./Artistic Taxidermists/339 Washington Street, Boston."

Maynard's early publications were largely on birds and his first paper was published in the *American Naturalist* in 1868. This was followed by a number of papers appearing in the *Proceedings of the Boston Society of Natural History*, the *Bulletin of the Essex Institute*, and the *Salem Naturalist*. Maynard's *Naturalist Guides* were published by Fields, Osgood and

Co., of Boston, one of the outstanding publishing houses in Boston at that time. About 1881, however, he established the house of C. J. Maynard and Company, Newtonville, Massachusetts. From that date, though he continued to send a few papers to other journals, his main works were published by himself. He not only set his own type but he made his own woodcuts and he printed, colored and bound the entire publication. He was proud of this ability and, in fact, wrote that he even made many of his tools.

Maynard was a very active field man and beginning in 1866 he made a number of collecting trips to Ipswich, Massachusetts, where he later lived for three years. He also visited Grand Manan and the Magdalen Islands, largely for bird study. Most of his trips, however, were to the south—to Florida and the Bahama Islands. Love of natural history, desire for travel, and the necessity of procuring specimens for his business motivated his field work. There seem to be some discrepancies in the dates given, especially for his early trips, in the various published accounts and in his own notes. He apparently did not begin writing his autobiography until some time after 1924 and completed it only shortly before his death. Consequently, it is not surprising that errors slipped in.

Maynard made his first trip to Florida during 1868-1869 with Charles Thurston for the purpose of collecting birds. A detailed and most interesting account of this trip was given by Maynard in his series of articles entitled, "A Naturalist in Florida," published in the *Florida Naturalist* between October 1928 and January 1930. Many of the birds collected on this as well as on other trips are now in the Museum of Comparative Zoology. Unfortunately, the special preserving method which he "invented," and of which he was so proud, has changed the color of the specimens, including the types, making them virtually useless.

In his notes covering his first expedition to the Florida Keys, a trip devoted mainly to the collecting of birds, Maynard wrote: "I saw my first living *Cerion* in November 1870, when I collected specimens of what I then knew as *Pupa incana* on Key West, Florida." In October 1873 Maynard and his friends sailed in the yacht "Nina" from Woods Hole, Massachusetts to Jacksonville, Florida, stopping along the way to collect, and arriving at the St. John's River on January 10, 1874. According to

his daughter, Maynard financed many of his early trips by taking with him well-to-do boys who were interested in camping and collecting. In 1882 Maynard was again in Florida, and with him was his bride Elizabeth Buxton Cotter of Boston. They spent their wedding trip collecting in the Indian River country of Florida. All of these Florida trips were devoted largely to collecting birds.

In 1884 he made his first trip to the Bahamas and, like his Florida trips, this one was mainly devoted to birds. In his notes he wrote: "I collected some land shells on this trip, but strangely, although I must have passed several species of *Cerion*, I collected a single species only. This I afterward described as *Strophia neglecta* and found it common a mile or so west of Fort Charlotte" [Nassau, New Providence]. Apparently his first trip to the Bahamas was restricted to the island of New Providence.

The Cerionidae is a family of land snails which are peculiar to the West Indies and the Lower Florida Keys. They live in a narrow band along the upper strand line usually within the reach of salt spray. They may be extremely abundant where they are found and in general live on sea grapes or other low vegetation, feeding mainly upon lichens and fungi. They are colonial in habit and the colonies though often separated by only short distances may be quite different in appearance. Most of these differences are now known to be of little or no taxonomic value at the species level. When Maynard reached the Bahamas he became fascinated with the group and eventually the Cerionidae became the main focus of his collecting. There is but a single genus in this family. *Cerion* is the valid generic name for this group with *Strophia* as a synonym: Maynard used both names in his writings.

On his second Bahama trip in 1887-1888 he landed at Nassau, New Providence, and from there went to Andros Island where he collected in the region from Fresh Creek to Middle Bight. From there he visited Rum Cay, Long Island, and Inagua. In his notes he does not mention collecting any *Cerion* on Andros, his notes being concerned largely with birds. He was on Rum Cay in January 1888 and wrote: "I did not collect any birds on the key but began my first important collections of *Cerion* here. I found a white species quite common on the west side near the salt ponds. This I named *Strophia alba*, and a species,

also white but well flecked with brown, further in the interior. This I named *Strophia lentiginosa*."

On January 20, 1888, he went ashore at Clarence Town, Long Island, where he found "three specimens of a rather remarkable *Cerion* which was perfectly smooth, polished and flesh-colored (*Strophia nuda* Maynard)." His stay on Inagua, like that on Long Island, was apparently very short, as he visited only Matthew Town and collected very little.

On March 18, 1888 he was in Kingston, Jamaica, and from there took a small schooner for Grand Cayman but prevailed upon the captain to let him off on Cayman Brac where he spent some time collecting before going to Little Cayman. He apparently spent considerable time on these islands and made large collections of *Cerion*, for he wrote, "I obtained four species, one of them exceedingly abundant. All of the shells were inactive on account of the prevailing dry weather. The common *Strophia*, as I called it *Strophia copia*, had gathered in such large numbers about the base of coconut trees that grew along the shore south of the hamlet that I could take them up in double handfuls. Many had climbed the trunks of the trees and a large number were on the debris cast up by the sea along the beach. Others had found their way into dug-outs that had been drawn up on the shore, and thus were undoubtedly carried about when the canoes were taken from this portion of the island to the other parts, or as I afterwards found out, to Little Cayman, where at least two colonies had been established, but where in one case a distinct species had been evolved. Some had crawled on some barrels which I had placed on the beach, and in which I had packed some corals, while quite a number had ventured in among the specimens. When I opened these at my house in Newton, the strophias came out and fastened themselves to grass and other herbage where they remained alive until winter."

From the above quotation it is obvious that Maynard had observed the ease with which *Cerion* are distributed and the tenacity for life which these animals have; yet, though he had the answer at his finger tips, he did not apply it to his science. Perhaps it was solely from a desire to describe new forms or perhaps from the fact that he sold collections, charging on the basis of the number of named forms, that he continued to name even the slightest variations. Certainly he did not apply what

he had observed, and when two obviously similar colonies occurred on separate islands or were separated by a creek, inlet or other barrier, they were given different names.

About Little Cayman he records that he found "at least ten species of Cerionidae. All of the species except one were found in a coconut grove on the north side near the west end. They were chiefly in a section grown up with guinea-grass." It was the study of these species which awakened his interest more than ever in this family. He states: "I became thoroughly convinced that I had to deal with an exceedingly plastic group of mollusks with many species having a very limited distribution." However, though he realized that he was dealing with a plastic group, he did not grasp the idea of minor differences between unit populations. He interpreted everything as a static, fixed picture and apparently felt that all minor differences, once established, would remain unchanged, leaving no room for interbreeding of the various elements.

On his return from his second Bahama trip he decided to issue a publication of his own rather than scatter his observations and descriptions of his new species through various journals. With this in mind he issued the first number of his "Contributions to Science," in April 1889. A monograph of the genus *Strophia* was included here. He wrote in his notes that "the early articles were illustrated by plates drawn in stone by myself, but not printed by me. Subsequently illustrations in this volume were from drawings made on wood and engraved by me, and I also manufactured the tools with which they were made." At this same time he also gave up his rooms in Boston and moved everything to his home in West Newton where he had made a laboratory and printing office for himself in the large barn.

He wrote very little about his third Bahama trip made in 1893 with George F. Curtis and J. W. Thorndike. They landed at Nassau and from there went to Treasure Cay, U Cay, Pimlico Cay, Highborne¹ Cay and cays near Allen Cay in the northern end of the Exuma group. They also visited Andros Island working from Fresh Creek to Middle Bight, and then touched at Green and High Cays. They collected several thousand *Cerion*, from which he described 28 species as new.

¹ The spelling of all place names are from United States H. O. chart no. 26b.

The fourth Bahama trip was made in 1897. On this five months trip which extended from February to July, Maynard sailed entirely around New Providence, collecting at many localities on this island and the small cays near shore. He then collected along the line of cays extending from the northeast of New Providence to Eleuthera and on Eleuthera near Current Settlement. On this trip he collected some 32,000 specimens and later described 37 new species from this material.

Maynard did not make another trip to the Bahamas until 1913, but in the sixteen years which intervened he was busy with a wide variety of activities and in writing numerous papers, most of which he published himself. These papers covered a variety of subjects, mostly on birds but including papers on trees, mosses, taxidermy, the use of formalin, the hibernation of animals and a series of papers on systematic zoology for teachers. At the same time he was also selling zoological supplies, running a course of nature study at Camp Metacomet in Centerville, Massachusetts, and giving nature study courses in the schools, in addition to conducting his nature walks. In 1908 he began the publication of his "Records of Walks and Talks with Nature" which included lists of plants and animals observed on the weekly walks which he conducted for teachers and others who wished to attend. It was from the sale of specimens, natural history supplies, his publications and the small fees charged for his classes and nature walks that Maynard procured a very frugal living. His "Contributions to the History of the *Cerionidae*" appeared as appendices in his series "Walks and Talks with Nature."

Maynard returned to the Bahamas for a fifth trip in 1913, arriving in New Providence on February 21. He collected in the vicinity of Nassau and noticed many changes that had occurred since his trip in 1897. The first automobile road had been built and there was a lighthouse at East Point; but what disturbed Maynard most was the fact that two old cemeteries, where *Cerion* had formerly been very abundant, had been converted into a botanical garden and a park, and the mollusks had been exterminated. On this trip he went across to Hog Island, opposite Nassau and collected a fossil *Cerion* which he named *C. thompsoni* in honor of his friend and host, Mr. Charles Thompson of Nassau. He also visited Spruce Cay, Athol Island and Long Cay, all just off the northeast end of

New Providence. This trip was cut short when Maynard accidentally shot himself in the left leg while climbing over a stone wall. He stated, however, that although the trip had been shortened he collected 1030 specimens of *Cerion*, which included two new species.

The sixth Bahama trip, in 1915, was, from the point of view of *Cerion*, the largest and most important trip he made. It extended from February 14 to June 3. On this trip he chartered a 10-ton sloop, the "Merry May," and engaged his old friend Charles Thompson and a helper, Joe Kemp, to sail her. They put in provisions for two months and set out from Nassau for the Silver Cays, then, going north and around Hog Island, ran down between Athol Island and Rose Island, landing on Low Bay Cay and Rose Island where both fossil and living *Cerion* were collected. Continuing south they landed on Bush Cay, one of the Ship Channel Group, where they collected 1040 specimens of a new species in two hours. Many of the specimens were living on exposed rock, an unusual place for *Cerion*. Their next stop was on Ship Channel Cay where again fossil and living specimens were collected. Both the fossil and living forms were described as new species, though he states that the "dead" individuals clearly illustrated the evolution of one species into the other! From here they continued south along the Exuma chain to the Allen Cays, U Cay, Highborne Cay, Long Cay, Little Norman Cay and East Cay collecting new species of *Cerion* on each island. They did not stop on Great Norman Cay, as hogs were seen roaming about and consequently the land shells would have been eaten. They stopped at Wax Cay, a small cay with a salina crossing it from east to west. The *Cerion* were exceedingly abundant on the under sides of the palm fronds and on the mangrove near the salina. Maynard wrote: "The *Cerions* which occurred on the mangroves of the salina were much dwarfed. We named the larger form *Strophia palmata* and the smaller one *S. p. minuta*." From here they went south stopping at Hawksbill Cays, Cistern Cay, Bell Cay, Fowl Cay, the Pipe Cays, Sampson Cay, Harvey Cay, Bitter Guana Cay, Farmers Cay and then, going through the Pimlico Cays without stopping, they headed for Norman Pond Cay. They collected here and on the small cays around the northern tip of Great Exuma Island. They made one station on Great Exuma and then went north to

Stocking Island. As it had rained all the preceding night the *Cerion* on Stocking Island were very active and Maynard found several pairs mating. He noticed here as elsewhere that many specimens were feeding on decaying vegetation, and that some specimens would burrow in the moist sand. Though they may have been laying eggs, he was never able to find any. They then ran south along Great Exuma and visited Maria Cay and the northern tip of Little Exuma Island.

At this point Maynard noticed that the men were becoming dissatisfied. The remainder of the trip as Maynard had planned it was to Long Island then north to Conception, Cat and Eleuthera Islands. This was unknown territory to the men and they were uneasy about venturing into a new area. Consequently, Maynard compromised, and it was agreed that they should round Great Exuma and then turn north along the western shore of the island and, sailing north, collect at numerous islands on the trip back to Nassau. This they did, making many new stations and arriving back in Nassau about April 1. The results of the Exuma Trip were some 50,000 specimens collected on 48 cays and islands, including a total of 55 species, of which 49 were described as new.

Maynard remained in Nassau until April 18 when he engaged the sloop "Joyful" with three men to sail her, and they left Thompson's Wharf and headed for Andros Island. They anchored first at Fresh Creek, Andros, and here Maynard spent most of his time collecting birds, though he did get one species of *Cerion*. On Goat Cay, at the mouth of Fresh Creek, *Cerion* were very abundant. Leaving here they sailed north along the lagoon between the reef and Andros, stopping at Stanyard Creek Settlement collecting birds and *Cerion*, then moving north to Calabash Cay where he records seeing huge Indian shell mounds composed largely of conch shells. He next landed at Pigeon Cay and then proceeded north to Saddleback Cay, Mastic Point, Nicholls Town and Morgan's Bluff where they collected in the low shrubs along the shore. They continued north to the Joulter Cays and across to Chub Point Cay in the Berry Islands where he again saw a large Indian shell mound, this one over a mile in length. They then went across to Crab Cay and thence to Thompsons Cay where Maynard collected *Cerion thayeri*, which he named in honor of Col. John E. Thayer of Lancaster, Massachusetts, who had helped finance some of

his Bahama trips. On Frazers Hog Cay he collected a coarse and very different *Cerion*, many specimens of which appeared to have been gnawed by rodents. They then stopped at Cat Cay, Whale Cay, and Little Whale Cay, where Maynard spent his time collecting birds as no *Cerion* were to be found. Going on to Bond's Cay, Little Harbour Cay, Cabbage Cay, Guano Cay and Bridgewater Cay he collected on each and on the latter cay he found a large *Cerion* which he named *Strophia travellii* in honor of Charles I. Travelli, whose kindness had made the Berry Island trip possible. Other stopping places in the Berry Islands included Holmes Cay, East Marketfish Cay, and East Soldiers Cay in the middle group. They then worked north along Hains Cay to Hawks Nest and out to Petit Cay. This is a very small cay with nothing but a heavy grass cover, but cerions were very abundant and they collected 1690 specimens of what he called *S. scutata*. As they were experiencing heavy seas at this time they ran north into Great Harbour where they anchored and visited Goat Cay. It was on this little cay that Maynard obtained what he considered three species of fossil *Cerion* from one small, low cliff. From here they went to Great Stirrup Cay then dropped south to Lignumvitae Cay, Bullocks Harbour and Bamboo Cay. As the month for which he had hired the "Joyful" was almost up and as they could not find a channel which would allow them to go farther south on the inside of the outer cays, Maynard decided to head back for Nassau so they turned north, crossed through Great Harbour and then proceeded straight to Nassau.

The result of the trip to Andros and the Berry Islands was a collection of some 50,000 specimens of *Cerion* comprising 46 species of which 42 were described as new. Maynard remained in Nassau from May 20 to June 1, collecting in the vicinity of the city and packing his collection for shipment to Newton. This was Maynard's last important collecting trip.

With the tremendous collections of *Cerion* which he had amassed, Maynard now began a series of papers which he entitled "Contributions to the History of the Cerionidae." There were twelve papers in this group, published between 1915 and 1926. Two papers describing new species of *Cerion* appeared in 1913 and 1914 and a "Catalogue of Specimens of the Family Cerionidae for Sale," which also contained descriptions of a number of new species, appeared in 1924. All these were pub-

lished as appendices to the various volumes of his "Records of Walks and Talks with Nature." Maynard wrote Part Two of his "Contributions" in collaboration with Mrs. William F. Clapp. At that time her husband, the late Dr. Clapp, was curator of Mollusks at the Museum of Comparative Zoology and they lived in Cambridge, Massachusetts. About once a week Mrs. Clapp went to Newton where she worked with Maynard in his laboratory-workshop in his barn. Here she did most of the radular and anatomical preparations, as well as aiding in the descriptions of the new species. However, she was not enthusiastic about the type and quality of the work Maynard was doing and so did not remain associated with him for long.

In connection with his work on *Cerion*, Maynard formulated a number of "laws," the most curious of which were the "Law of Cyclic Recession" and the "Law of Individual and Specific Reincarnation." It is difficult to distinguish the difference between these two laws and the essence of each is that "individual shells frequently occur in one species that so closely resemble others in another species, which may inhabit an island a hundred miles or more away (thus precluding any close phylogenetic relationship), that they would appear to be members of that distant species. Furthermore, a similar resemblance may extend over an entire species." By this means he could explain his many species, completely overlooking the fact that a continuous chain of islands connected the two points and that the shells could easily be distributed by hurricanes, by native boats plying between the islands, by floating debris or other mechanical means. Many of these factors he had noted in his early days of collecting and so it is difficult to understand why he ignored so completely the facts of his earlier observations.

Maynard made one more trip to the Bahamas in the summer of 1924. He was 80 years old at the time and was accompanied by his daughter, Pearl J. Maynard. Though Pearl had often worked with her father, she did not have his interest in natural history and this was the only trip she took with him. It was a trip of only five weeks and was confined to the island of New Providence and a few of the nearby cays. However, even though Maynard had collected on New Providence on all of his previous trips, he still found eleven "species" which he described as new.

After 1924 Maynard did not take any further collecting trips but spent his time writing and conducting his nature classes. At the time of his death he was writing a series of articles on his experiences in Florida, which were appearing in the *Florida Naturalist*. These articles were well written and give a vivid picture of conditions in that state just after the Civil War.

Charles Johnson Maynard died at his home on 457 Crafts Street, West Newton, Mass. on October 15, 1929 at the age of 84. He had been seriously ill for some time and had not worked with his collection or conducted nature walks, but he was actively writing almost to the time of his death.

Shortly after his death, Miss Pearl J. Maynard, his daughter, wrote to Dr. Thomas Barbour at the Museum of Comparative Zoology and offered his large collection of Cerionidae for sale. As the collection was so large and the specimens so numerous, it was decided to buy it jointly with the United States National Museum for \$500. The collection was divided equally between the two institutions with the holotypes being retained at the Museum of Comparative Zoology. A few duplicate sets of the larger series of Maynard's types were sold to various institutions so that much of Maynard's type material is now well distributed.

The collection had been stored on the second floor of Maynard's barn which he had converted into his study and workshop. His small printing press was in the harness room on the first floor. A leaky roof and broken windows which Maynard failed to repair in the last years of his life let in not only the elements but also the pigeons. These pigeons, entering through the broken windows, took over the second floor, and Maynard, who was essentially a "zoophile," allowed them free reign. Consequently, the collection, at the time it was sold, was in rather sad shape, for the cabinet drawers had warped and once pulled open could not be closed. The top drawers of the cabinets became a parade ground for the pigeons, and their droppings cemented the shells together in a solid mass! After transferring the collection in its original drawers to the Museum of Comparative Zoology, each lot was sorted, cleaned and properly labelled—a truly gigantic task.

There are 553 named forms in the family Cerionidae as listed by Clench (1957) in his catalogue of this group. Of these 328 are from the Bahama Islands and Maynard was responsi-

ble for 220. Probably less than ten per cent of these will remain as valid species or subspecies when the revision of the Bahama Cerionidae is completed.

As indicated throughout this account of Maynard's work, his early observations and plans for studying this group were good. However, the deeper he went into the problem the more involved his ideas became and eventually, instead of trying to arrange the various species and subspecies in natural groups, he saw only the slight differences between populations. He described these "species" very briefly and inadequately and the last ones were reduced to a few lines published in a sales catalogue. As pointed out by Clench (1957), his work was marred by a multitude of inaccuracies. Much of this was due to the lack of formal training and also isolation from scientific workers, even though he was living in the middle of one of the most active and important centers of taxonomic study in the world. If Maynard had only realized his own shortcomings and taken advantage of the help that could have been his, he would have had the benefit of association with many outstanding scientists. Under such circumstances his own lack of training might not have been such a drawback. Maynard's most important contribution to the study of the Cerionidae was his large collection. He visited and made collections at many isolated localities in the Bahama and Cayman Islands many of which have not been visited since. He was a tireless collector and accomplished much for which he should be given a great deal of credit.

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